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(54) Title: **HIP/PAP POLYPEPTIDE COMPOSITION FOR USE IN LIVER REGENERATION AND FOR THE PREVENTION OF LIVER FAILURE**

(57) Abstract: This invention is based on the experimental finding that HIP/PAP has mitogenic and antiapoptotic effects in vitro on hepatocytes in primary culture. Moreover, HIP/PAP is a mitogenic and anti-apoptotic molecule for hepatocytes, *in vivo*, during liver failure and liver regeneration. The present invention is also based on the experimental finding that HIP/PAP administration has no adverse effects in mammals. This invention concerns a pharmaceutical composition for stimulating liver regeneration *in vivo* including after chronic/acute liver failure, comprising an effective amount of a polypeptide comprising an amino acid sequence having 90% amino acid identity with the polypeptide consisting of the amino acid sequence starting at the amino acid residue (36) and ending at the amino acid residue (175) of sequence SEQ ID N°1, in combination with at least one physiologically acceptable excipient.